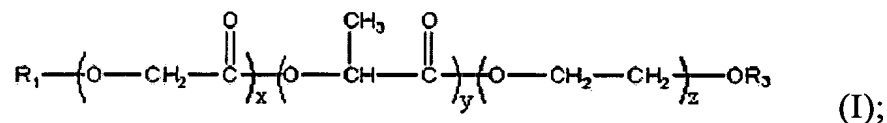


WHAT IS CLAIMED IS:

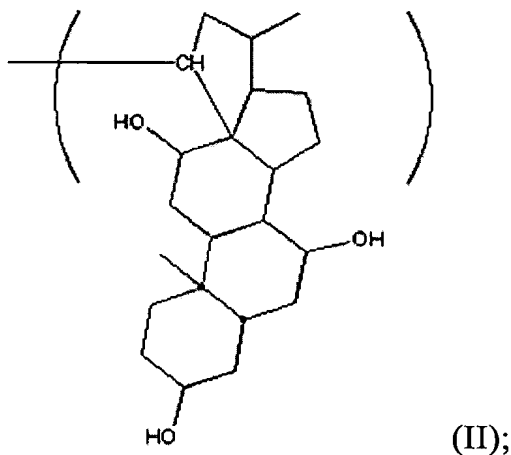
1. A biodegradable block copolymer of the following formula (I):



5 wherein R_1 is hydrogen, or $-C(=O)-R_2$; R_2 is C_{7-30} alkyl substituted or unsubstituted with functional groups; R_3 is hydrogen, or C_{1-6} alkyl; and x , y or z individually is an integer greater than 0.

2. The polymer of claim 1, wherein said R_1 is selected from the group consisting of cholic acid, fatty acid, folic acid and cholesterol.

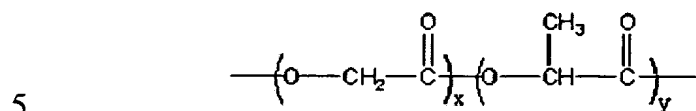
3. The polymer of claim 1, wherein said R_2 is:



4. The polymer as claimed in claim 1, wherein said R_3 is methyl.

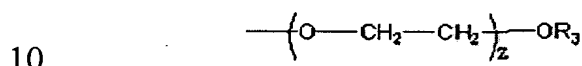
5. The polymer as claimed in claim 1, wherein said R₂ is hydrogen, and said polymer is applied for drug releasing or embolic agents.

6. The polymer as claimed in claim 1, wherein the molecular weight of the hydrophobic block:



ranges from 1000 to 6000.

7. The polymer as claimed in claim 1, wherein the molecular weight of said hydrophilic block:



ranges from 200 to 5000.

8. The polymer as claimed in claim 2, wherein x: y: z is 3-18:11-66:4-114.

15 9. The polymer as claimed in claim 1, wherein said polymer is thermo-sensitive polymer having an LCST ranging from 15 °C to 30 °C.

10. The polymer as claimed in claim 1, wherein said polymer is functioned as an embolic agent.